

Autism Research Institute

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Where ARI Stands On Biological Research

In 1943 Leo Kanner first used the term "autism" to describe a group of children who shared common behaviors, and twenty years later ARI's founder Bernard Rimland persuaded professionals to view these behaviors as a result of an underlying biological condition.

A great deal has been learned about autism in just the past ten years, and we are now much closer to uncovering the biological profile of individuals on the autism spectrum. Such findings will likely determine the appropriate treatment strategies as well as develop ways to prevent those symptoms that interfere with an individual's quality of life.

What are the major biological findings in autism?

Genetic research has found evidence of an interaction between genes and the environment, and environmental research has revealed many contributors associated with autism. Neurological research has documented changes in brain structure and growth, and medical research has reported chronic health problems in many, if not the majority, of these individuals.

What is the next major step forward?

Research is needed to quantify and qualify how known neurological structures associated with autism have been altered by the environment's impact on gene expression, both prenatally and postnatally. The age of the person and the type and duration of the environmental insult will almost certainly explain much of the heterogeneity of the autism spectrum with respect to differences in developmental history, communication style, cognitive processing, sensory responsiveness, physical health condition, and behavior.

The determination of one or more biological profiles can be accomplished by better networking among scientists in the field. We urge government and private funding agencies to encourage and financially support integrative, multi-disciplinary research on autism.

About the Autism Research Institute

The Autism Research Institute (ARI) was established in 1967 by Dr. Bernard Rimland, a research pioneer and parent advocate in the autism field for nearly 50 years. In his 1964 ground-breaking book titled *Infantile Autism*, Dr. Rimland redirected the field from viewing autism as a result of parental neglect to a complex biological condition. In the 1968 film documentary, *The Invisible Wall*, he suggested that symptoms and behaviors associated with autism could likely be due to the environment's influence on genetic expression.

Since its founding by Dr. Rimland, ARI is known for its encouragement and support of biological research. ARI has published a quarterly newsletter, *Autism Research Review International (ARRI)*, since 1987 reporting the current developments in biomedical and educational research – archives of Volumes 1 to 20 are available online at www.arri-archives.com.

Over the past 10 years, we have funded studies on genetics, environmental triggers, and neurology as well as supported medical research on gastrointestinal problems, the immune system, and metabolism. Experts in all of the areas mentioned above are represented at ARI's Scientific Advisory Board and participate at our think tanks. ARI also helps support a neurological tissue bank at the University of Maryland, and a gastrointestinal bio-repository at Harvard/Massachusetts General Hospital.

ARI distributes relevant information to parents and professionals through our science newsletter (*ARRI*), websites, online webinars, published books, e-newsletters, and social media and to physicians thorough our physician-oriented e-newsletter and complimentary webcast series offered in joint providership with Cleveland Clinic. Our organization also supports adults on the spectrum through our 12-week online course geared toward training direct support providers, our online employment portal, and other initiatives led by the Autistic Global Initiative, a program of ARI.

Last year Jessica Kingsley Publishers reprinted Dr. Rimland's seminal book, *Infantile Autism*, along with updates by experts in the field, on many important issues that were raised in his book. *Infantile Autism* is available on Amazon.com and JKP.com.

Jessica Kingsley Publishers is planning to publish ARI's multi-disciplinary book on understanding and treating self-injurious behavior later this year; the book includes chapters written by researchers as well as experienced clinicians.

The Autism Research Institute is a 501-c-3 non-profit organization, and has received the highest 4-star rating for fiscal management, accountability, and transparency from Charity Navigator. ARI relies on the charitable contributions from individuals and organizations.